What is the PAME MPA network toolbox?

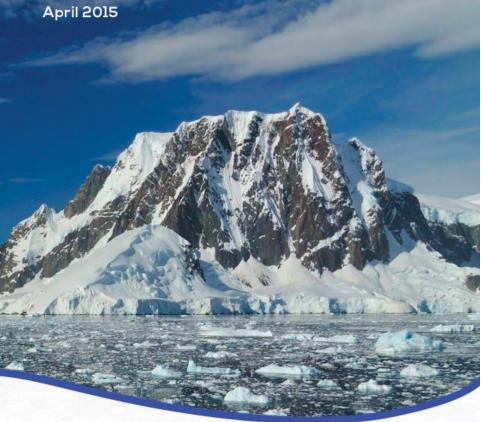
- a project overview for the 4th workshop



Martin Sommerkorn WWF Arctic Programme

Cambridge Bay, 19 March 2019

Framework for a Pan-Arctic Network of Marine Protected Areas



PAME

TIC COUNCIL

Framework for a Pan-Arctic Network of Marine Protected Areas

A Network of Places and Natural Features Specially-managed for the Conservation and Protection of the Arctic Marine Environment

Vision

An ecologically connected, representative and effectively-managed network of protected and specially managed areas that protects and promotes the resilience of the biological diversity, ecological processes and cultural *heritage of the Arctic marine environment, and* the social and economic benefits they provide to present and future generations.

Framework for a Pan-Arctic Network of Marine Protected Areas Framework for a Pan-Arctic Network of Marine Protected Areas

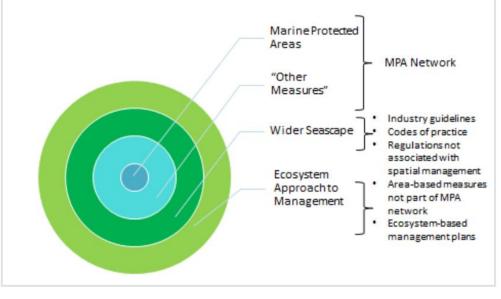
A Network of Places and Natural Features Specially-managed for the Conservation and Protection of the Arctic Marine Environment



Aim of PAME's MPA Toolbox Project

- To develop guidance to assist Arctic states in advancing their MPA networks by providing theory and tools.
- To enable collaboration and participation on MPA network development between Arctic countries, Permanent Participants, Arctic Council Working Groups, the conservation and science communities and other stakeholders.

MPA Networks as Part of an Ecosystem Approach to Management



So far: three workshops and a toolbox that is expected to grow



Science and Tools for Developing Arctic Marine Protected Area (MPA) Networks: Understanding Connectivity and Identifying Management Models

Report from the First Expert Workshop on Marine Protected Area networks in the Arctic September 2016 - Washington D.C, USA



SYKE



Understanding MPA Networks as Tools for

Resilience in a Changing Arctic

Report from the Second Expert Workshop on Marine Protected Area networks in the Arctic

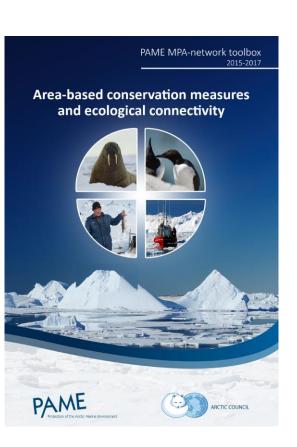
February 2017 - Copenhagen, Denmark

PAME

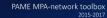
Scientific considerations of how Arctic Marine Protected Area (MPA) networks may reduce negative effects of climate change and ocean acidification

Report from the Third Expert Workshop on Marine Protected Area networks in the Arctic, organised by Swedon and Finland under the auspices of the PAME working group of the Arctic Council in Heliziki, Finland, 21-22 Soptember 2017 Report 2017:





- Clarifies characteristics of "other areabased conservation measures", including opportunities for conservation, biodiversity resilience to change, and participation.
- Clarifies the need for and benefits of integrating ecological connectivity into Arctic MPA network and design.
- Presents tools on how to select area-based measures, and how to integrate connectivity, in MPA network planning and design.



Area-based conservation measures and ecological connectivity



Example: "other measures"

I. Clarification of context and meaning

Characteristic	Marine Protected Areas	"Other Measures"	
Purpose	Conservation.	May be conservation, or conservation may be a recognized outcome and / or objective of an area established for another purpose.	
Scope	Generally focused on entire ecosystem, though individual objectives may target specific elements of biodiversity (e.g. particular species, habitat).	Often focused on specific elements of biodiversity, including mitigating impacts of an activity on a species or habitat.	
Duration	Typically permanent.	May be permanent or temporary.	
Geographic location	Fixed.	May be fixed or dynamic (tied to specific environmental conditions or human activities).	
Level of Protection	Ranges from multiple use to "no take".	Ranges from multiple use to "no take".	
Implementation	Protected area agency(ies).	Can be implemented by a wide range of agencies and partners, including those regulating specific activities (e.g. shipping, fishing, hunting, energy, water quality).	



Area-based conservation measures and ecological connectivity



Example: "other measures"

II. Tool # 1: Aligning area based conservation measures with important biodiversity categories

Areas important for Categories of Biodiversity ¹⁰	Value(s)	Conservation Objective / Need	Options for Area-based Conservation Measures ¹¹
Areas or geophysical features with important habitats or ecosystems (e.g. coral gardens, marginal ice zone)	Sustain important ecosystem functions (e.g. productivity, diversity) or structure (e.g. food-webs, unique species).	Long-term protection of valuable and vulnerable habitat and of genetic diversity.	 ✓ MPAs ✓ Exclusion areas for harmful activities
Areas important for life history stages of different species (e.g. reproduction; foraging; spawning; wintering; nursery; staging areas of birds, marine mammals, fish)	Sustain populations of species important for ecosystem and/or human use values.	Long-term protection of open water, seafloor, ice- associated, and coastal features and habitats critical to key marine species and ecosystem processes. Long-term, temporary and/or impact-specific protection regimes for key areas (e.g. foraging) and/or during critical seasons (e.g. breeding, human use).	 ✓ MPAs ✓ Seasonal closures for take or access ✓ Year round measures preventing habitat degradation ✓ Exclusion areas for harmful activities ✓ Area regulations on impact/disturbance
Movement corridors and migration routes of important species (e.g. marine mammals)	Connectivity for species important for ecosystem and/or human use values (e.g. food security).	Long-term, temporary and/or impact-specific protection regimes (e.g. from physical disturbance, installations) for key corridors and routes.	 ✓ Exclusion areas for harmful activities (seasonal) or (permanent) infrastructure ✓ Area regulations on impact/ disturbance